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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/607,049	06/27/2003	Kenichi Hiraoka	239516US0CONT	4138

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1940 DUKE STREET  
ALEXANDRIA, VA 22314

EXAMINER
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KUHNS, SARAH LOUISE

ART UNIT	PAPER NUMBER
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1761

DATE MAILED: 10/18/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/607,049

Applicant(s)

HIRAOKA ET AL.

Examiner

Sarah L Kuhns

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 27 June 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected:
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yip, U.S. Patent 3,852,489, in view of Bender, U.S. Patent 5,262,186.

In regard to claim 1, Yip discloses a process for producing a fresh fish egg product comprising treating roe with an aqueous alkali solution (column 2, line 50). Yip fails to disclose the washing off or neutralizing of the roe. Bender, however, discloses a process for treating fish with an aqueous alkali solution (column 4, line 46) and additionally discloses that the fish can be washed with and/or neutralized with acid following the alkali treatment (column 5, line 45). It would therefore be obvious to wash and/or neutralize the roe to remove the aqueous alkali solution after treatment is complete.

In regard to claim 2, Yip discloses roe from salmon (column 2, line 28).

In regard to claim 3, Yip discloses dissolving an alkali in water to produce the aqueous alkali solution (column 4, line 14).

In regard to claims 4 and 15, Yip discloses the use of alkali metal sulfites and citrates (column 3, line 17) and also teaches that other water soluble compounds can be

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used as well (column 3, line 15). Bender discloses the use of phosphate salt (column 3, line 53), and specifically sodium phosphate (column 3, line 67), in the aqueous alkali solution. It would therefore be obvious to use sodium phosphate as the alkali in the treatment solution because it is readily available in food grade and can remain on the surface of the fish product to provide a surface much less conducive to supporting bacterial growth.

In regard to claims 5-7 and 16-18, Yip fails to disclose the exact pH of the aqueous alkaline treatment solution. Bender discloses a preferred pH range of 11.6-13.5 (column 4, line 63). It would therefore be obvious to use such a pH for the alkali solution in order to ensure that all bacteria present is killed or at least greatly reduced.

In regard to claim 8, Yip discloses a treatment time of about 20 minutes (column 4, line 21).

In regard to claim 9, Yip discloses a treatment temperature of 50-60°F which is 10-15.6°C (column 4, line 19).

In regard to claim 10, Yip fails to disclose the washing of the fish product. However, Bender discloses that the fish can be washed with and/or neutralized with acid following the alkali treatment (column 5, line 45). Although Bender does not disclose an exact washing time it would be obvious to wash the fish product until the remaining alkali solution was completely removed.

In regard to claim 11, Yip fails to disclose the washing of the fish product. Bender discloses washing the fish product with water (column 5, line 46). It would be

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obvious to wash the fish product with water because water is readily available and will successfully remove or at least dilute the alkali solution remaining on the fish product.

In regard to claim 12, Yip discloses a fresh fish egg product made from treatment with the aqueous alkali solution (column 2, line 36).

In regard to claim 13, Yip discloses a fresh fish egg product wherein the fish eggs are from salmon (column 2, line 36).

In regard to claim 14, Yip discloses dissolving an alkali in water to produce the aqueous alkali solution (column 4, line 14) and also discloses a fresh fish egg product wherein the fish eggs are from salmon (column 2, line 36).

In regard to claims 19 and 20, Yip discloses a fish product that is salted hard roe of salmon (column 2, line 27).

### ***Conclusion***


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sarah L. Kuhns whose telephone number is 571-272-1088. The examiner can normally be reached on Monday - Friday from 8:00 am - 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Milton Cano can be reached on 571-272-1398. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SLK



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